
INTEROFFICE MEMORANDUM

TO: NIVEA BERRIOS
FROM: IGNACIO BARRAGAN & TIM BLEASDALE
SUBJECT: BACKGROUND ON CHILEAN ENVIRONMENTAL TRIBUNALS
& ENVIRONMENTAL LAW REFORM
DATE: AUGUST 7, 2013

INTRODUCTION

This memorandum provides a general overview of the current environmental legal climate of Chile for the purpose of aiding the Environmental Appeals Board (“E.A.B.”) as it prepares to meet with delegates from Chile. Part I provides an overview the political subdivisions and governmental structure of Chile. Part II provides an overview of environmental law in Chile, specifically the on-going environmental law reform movement. Part III provides a detailed description of Chile’s environmental tribunals, their jurisdiction, and their case load. Part IV provides background on existing environmental structures and summarizes the current state of the environmental statutory framework in Chile. Part V provides a brief overview of significant environmental issues in Chile.

I. Overview of Chilean Political Subdivisions & Governmental Structure.

Until 1988, Chile was ruled by the military dictatorship of Augusto Pinochet. Today, it is a democratic republic ruled by a Constitution approved in October 1980.¹ The national government is divided into three branches: the executive, the legislative, and judicial branches. The executive branch is headed by a nationally elected President.² Legislative power is vested in a bicameral National Congress (Congreso Nacional) comprised of a Senate (Senado) and a Chamber of Deputies (Cámara de Diputados).³ The judiciary is independent and autonomous; however, because Chile is a civil law jurisdiction, the judiciary lacks the power to set binding precedent or invalidate laws.⁴ The judicial system is divided into three tiers: the Supreme Court (Corte Suprema) is the

¹ Nadia Kaddour, *Environmental Law of Chile in Comparative Environmental Law and Regulation*, Thomas Reuters (2011) at 14-5 [hereinafter *Comparative Environmental Law*].

² *Id.*

³ *Id.*

⁴ *Id.*

highest court, the Courts of Appeal (Cortes de Apelacion) are the intermediate courts, and the Tribunals of First Instance are the lowest level courts.⁵ Additionally, Chile has a fourth special court, known as the Constitutional Court (Tribunal Constitucional) that must review all statutes for constitutionality before they are enacted.⁶

As the longest nation in the world, Chile stretches down the western coast of South America covering a distance roughly equivalent to the distance from New York to San Francisco and is never more than 150 miles wide.⁷ Chile is divided into 15 regions headed by a presidentially appointed intendent.⁸ Regions are designated both by a name and Roman numeral.⁹ In turn, the regions are divided into provinces governed by presidentially appointed governors.¹⁰ Finally, the provinces are divided into communes governed by municipalities.¹¹ Each municipality has a mayor and councilors, all of whom are elected by the inhabitants of the communes under the authority of the particular municipality.¹² In total, there are 346 communes.¹³

II. Environmental Law Reform in Chile.

Environmental Law in Chile has undergone substantial overhaul in recent years. Prior to its reform in 1994, the country's environmental regulation was headed by the National Commission for the Environment (CONAMA), which coordinated environmental policy and standards amongst a number of ministries and other public services.¹⁴ Prior to the enactment of Chile's Environmental Framework Law, Chile's environmental institutions were built on a horizontal rather than a vertical model.¹⁵ Each government ministry had jurisdiction over environmental matters relevant to its area of expertise.¹⁶

In 1994, however, Chile enacted new legislation reforming environmental law. Chile's environmental reform was, in large part, spurred by the need to tackle emerging environmental problems that the existing legal framework was not equipped to address. For example, in 2005, authorities partially shut down a new pulp mill near the southern city of Valdivia after it allegedly exceeded pollution limits, a fact some linked to the

⁵ *Id.*

⁶ *Id.* at 14-6.

⁷ *Id.* at 14-2.

⁸ *Id.*

⁹ *Id.*

¹⁰ *Id.*

¹¹ *Id.*

¹² *Id.*

¹³ *Id.*

¹⁴ Tom Azzopardi, *Cleaning Up Environmental Regulation*, BUSSINESS CHILE, available at <http://www.businesschile.cl/en/news/cronica/cleaning-environmental-regulation> (last visited August 7, 2013) [hereinafter *Business Chile*].

¹⁵ Comparative Environmental Law, *supra* note 1, at 14-4.

¹⁶ *Id.*

disappearance of wildfowl from a nearby nature reserve.¹⁷ Then, in early 2009, the Supreme Court halted construction of a new coal-fired generation project on central Chile's coast, ruling that its environmental license had been granted on land set aside for conservation.¹⁸ As a consequence, Chileans were becoming more concerned about environmental issues such as climate change, water shortages, and waste management, putting pressure on the government to act.¹⁹

III. Environmental Tribunals.

To meet these challenges, Chile needed to: 1) thoroughly and efficiently implement its environmental policies; 2) further integrate environmental concerns into economic, social and sectoral decisions; and 3) strengthen its international environmental co-operation.²⁰ Hence, on June 18, 2012, Chile's legislature passed Law 20600 on the creation of new environmental courts in order to address national environmental concerns. As an extension of these newly created courts, the Superintendency of the Environment, was granted the power to prosecute environmental violations.²¹ The law creates three new courts: one located in the central region of Santiago, which is currently operational and another two tribunals are slated for operation in the northern region of Antofagasta, and the southern region of Valdivia.²²

A. Organizational Framework

Article I of the enacting statute, which created the environmental tribunals, identifies the new tribunals as a judicial entity in the county of Chile.²³ In addition, the enacting statute requires that each tribunal be represented by three "Ministros" or judges, 2 which must be lawyers with an administrative or environmental law background, and 1 which must have scientific background in an environmentally related field, with at least 10 years of experience.²⁴ In addition, each environmental tribunal is required to have two alternate judges: one must be an attorney with administrative or environmental

¹⁷ *Business Chile*, *supra* note 14.

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Environmental Performance Reviews, Chile: Conclusions and Recommendations*, ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT UN ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN, available at <http://www.oecd.org/env/country-reviews/34856244.pdf> (last visited July 12, 2013) [hereinafter *Envtl. Performance Rev.*].

²¹ See generally Graciela Rodriguez-Ferrand, *Chile: New Law Creates Environmental Courts* [hereinafter *New Law*] GLOBAL LEGAL MONITOR 1 (July 12, 2013) available at http://www.loc.gov/lawweb/servlet/lloc_news?disp1_1205403263_text.

²² *Id.*

²³ Ley No. 20600, 18 June 2012, Crea Los Tribunales Ambientales [Creates the Environmental Tribunals] [hereinafter *Law 20600, Creating Env'tl. Tribunals*] tit. I, art. I, sec. I, DIARIO OFICIAL, Biblioteca del Congreso Nacional de Chile [BCNC], 28 June 2012 (Chile), available at <http://www.leychile.cl/N?i=1041361&f=2012-06-28&p=>.

²⁴ *Id.* at tit. I, art. II.

background and the other must have scientific background in an environmentally related field.²⁵ Both alternates must possess at least 8 years of professional experience.²⁶ All Ministers serve 6 year terms and may be reelected for two consecutive terms.²⁷

Generally, in order to prevent potential conflicts of interest, no Minister having served in an executive position of the EPA corollary or its subdivisions may be appointed to serve as a judge in an environmental tribunal.²⁸ Moreover, the tribunal is required to meet at least 3 times a week and must solve all quorums by majority resolution.²⁹ In case there are not enough judges available in one Tribunal to reach a quorum, Article 10 of Title I of Law 20600 provides that a judge from another environmental tribunal should fill the void.

B. Jurisdiction.

The establishment of the three specialized tribunals addresses long standing criticisms that Chile lacks judicial review with expertise in environmental law. To this end, “both individuals and institutions will have legal standing to bring a claim of any violation of environmental laws and regulations before the newly created courts.”³⁰ Under Law 20600, the tribunals are competent to hear the following types of cases:

- (1) complaints made against official decrees establishing primary or secondary standards of environmental quality and emission standards, and establishing prevention plans or decontamination;
- (2) compensation claims for environmental damage;
- (3) claims against the resolutions of the Ministry of the Environment;
- (4) cases to authorize provisional measures, suspensions and sanctions by the Ministry of the Environment;
- (5) any claims opposing a decision of the Committee of Ministers or the Executive Director;

²⁵ *Id.* at tit. I. art. II, sec. IIX.

²⁶ *Id.*

²⁷ *Id.* at tit. I. art. II, sec. XII.

²⁸ *Id.* at tit. I, art III, sec. I.

²⁹ *Id.* at tit. I, art VI, secs. I, II.

³⁰ *Id.* citing *Tribunales Ambientales Comienzan a Operar en Diciembre de 2012* [hereinafter *Tribunales*], BIBLIOTECA DEL CONGRESO NACIONAL DE CHILE –BCN 1 (July 12, 2013), available at http://www.bcn.cl/carpeta_temas_profundidad/tribunales-ambientales-comienzan-a-operar-en-diciembre-de-2012. See generally Law 20600, Creating the Environmental Tribunals, *supra* note 31.

- (6) complaints challenging administrative decisions rendered by a Minister or a public service entity for the execution or implementation of emissions and/or quality standards;
- (7) claims filed by individuals or companies challenging rulings by the Committee of Ministers or the Executive Director of the EEA, if those rulings were not based on an environmental impact assessment;
- (8) complaints challenging administrative decisions that annul an environmental regulation;³¹
- (9) all other matters established by law.³²

When reviewing an issue in its chambers, the Environmental Tribunals are obliged to weigh the evidence according to the rules of sound judgment and in doing so shall state the legal reasons and logical, scientific or technical experience which form the basis of those conclusions.³³ In general, the tribunals are also required to take into special consideration the multiplicity, severity, accuracy, and consistency of the evidence or history of the process used, so that the balancing test leads logically to the conclusions that support the sentencing.³⁴

Santiago Tribunal: Santiago is the first tribunal to be implemented since the passing of Law 20600. The Santiago Tribunal, however, is called “El Segundo Tribunal Ambiental” (The Second Environmental Tribunal), invoking its U.S. counterpart which numbers its federal courts.³⁵ The Second Environmental Tribunal will have jurisdiction over regions like Valparaíso (Region V), Metropolitana (Santiago Metropolitan Region³⁶), de O’Higgins (Region VI) and del Maule (Region VII)³⁷ and presumably will review a greater portion of the environmental problems throughout the country because forty-percent of the country’s overall population lives in the metropolitan area around Santiago.³⁸ The four regions covered by the Santiago Tribunal represent the central regions of Chile. This tribunal is likely to see cases arising out of the timber industry.

³¹ New Law, *supra* note 1. *See also* Law 20600, Creating Env’tl. Tribunals, *supra* note 31, at tit. II, art. XVII.

³² Law 20600, Creating Env’tl. Tribunals, *supra* note 31, at tit. II, art. XVII, sec. IX.

³³ Law 20600, Creating Env’tl. Tribunals, *supra* note 31, at tit. II, art. XXXV.

³⁴ *Id.*

³⁵ *Tribunales*, *supra* note 3, at 1.

³⁶ The Santiago Metropolitan Region is the only region without a numerical designation.

³⁷ *Id.* *See also* Law 20600, Creating Env’tl. Tribunals, *supra* note 31, at tit. I, art. 5, sec. b.

³⁸ *Env’tl. Performance Rev.*, *supra* note 20, at 4.

Other Tribunals: Although the Chilean government has successfully appointed a panel of 5 judges to the Santiago Tribunal,³⁹ it has not yet instituted tribunals in Antofagasta and Valdivia.⁴⁰ The following section identifies their projected jurisdictional boundaries and explores possible environmental issues in their respective regions.

Antofagasta: The tribunal in Antofagasta is located in the northern region of Chile.⁴¹ The Tribunal in Antofagasta is called “el Primer Tribunal Ambiental” (The First Environmental Tribunal).⁴² Geographically, the First Tribunal’s jurisdiction includes the regions of Arica y Parinacota (Region XV), Tarapaca (Region I), Antofagasta (Region II), Atacama (Region III), and Coquimbo (Region IV).⁴³ These five regions represent northern Chile, which is home to the country’s desert region.

Valdivia: The Third Environmental Tribunal is located in the southern region of Chile in Valdivia.⁴⁴ Geographically, this tribunal will have jurisdiction to hear cases affecting the following regions: del Bío Bío (Region VIII), La Araucania (Region IX), Los Rios (Region XIV), Los Lagos (Region X), Aysen (Region XI) and Magallanes (Region XII).⁴⁵ These six regions represent southern Chile. This tribunal is likely to see cases arising out of the timber industry and mining industry.

C. Case Load.

As of July 12, 2013, the existing Tribunal in Santiago has reviewed only a handful of cases. One notable case involved a decision to by the Ministry of the Environment ordering Barrick Gold Corporation, a mining company, to vacate its mining operations because they were posing unreasonable adverse affects on the environment. The Public Tribunal was carried out against the transnational mining company to judge its behavior with respect to the “environment, society, culture, and economy, and towards the ecosystems, communities and people of Argentina, Chile and Peru. The tribunal was

³⁹ Daniel P. Berner, *Chile Supreme Court Swears In Members of Chile’s First Environmental Tribunal*, Chile Highlights (Vol. IV 2012) 1, BEVERIDGE AND DIAMOND P.C. (July 11, 2013), available at <http://www.environmentallawportal.com/chile-environmental-developments-q4-2012>.

⁴⁰ According to the enacting statute, these other two tribunals can be implemented within 12 months of the passing of the law, unlike the Santiago tribunal, which had to be in full force within 6 months. See Law 20600, Creating Env’tl. Tribunals, *supra* note 31, at *Transitory Dispositions*, art. II.

⁴¹ New Law, *supra* note 1.

⁴² *Tribunales*, *supra* note 3, at 1.

⁴³ *Id.* See also Law 20600, Creating Env’tl. Tribunals, *supra* note 31, at tit. I, art. 5, sec. a.

⁴⁴ New Law, *supra* note 1.

⁴⁵ *Tribunales*, *supra* note 1. See also Law 20600, Creating Env’tl. Tribunals, *supra* note 31, at tit. I, art. 5, sec. c.

convened by social movements, principally organizations and networks of campesinos, small producers and citizens.⁴⁶

D. Scope of Review

The environmental tribunals have an unprecedented scope of review. The recently created Environmental Tribunals in Chile are independent parts of the judicial branch of government. Hence Chile's environmental tribunals operate as specialized courts reviewing the majority of environmental law questions, and consequently are not obliged to give the same level of deference to Chile's environmental agency's decisions.⁴⁷ The scope of appellate review is outlined in Title II, Article 26.

Although subject to appellate level review, Law 20600 delineates some conditions that must be met in order to appeal a Tribunal's decision.⁴⁸ For example, only decisions that conclude that an action is inadmissible, or that involve a trial, or that set term limits or eliminate all possibility for the continuation of an activity are subject to appellate review.⁴⁹ In addition, any party looking to appeal a tribunal's final disposition to the "Corte de Apelaciones," the court of appeals, must do so within ten (10) days of notice.⁵⁰

The appeal must be filed with the Environmental Tribunal which delivered the judgment under appeal to the Supreme Court and shall have preference for hearing and decision.⁵¹ To this end, the appeal must comply with the provisions of "el Código de Procedimiento Civil" or Civil Procedure Code.⁵² In addition, the kind of evidence that can be presented on appeal is limited to documents, unless the court says otherwise.⁵³ Of particular note, however, is that because the Chilean court system is not bound by jurisprudence, any disputes between the separate environmental tribunals are resolved by the Chilean Supreme Court.⁵⁴

IV. Environmental Statutory Framework.

⁴⁶ Transnational Mining Tribunal: The Case of Barrick Gold Corporation in Latin America (Chile, Argentina and Peru) <http://www.miningwatch.ca/transnational-mining-tribunal-case-barrick-gold-corporation-latin-america-chile-argentina-and-peru>

⁴⁷ See generally Law 20600, Creating Env'tl. Tribunals, *supra* note 31, at tit. II, art. XXVI (discussing the scope of appellate review).

⁴⁸ *Id.*

⁴⁹ *Id.*

⁵⁰ *Id.* at section 2 (the court of appeals is the court of appeals that has jurisdiction in the same district as the environmental tribunal).

⁵¹ *Id.* at sec. V.

⁵² *Id.*

⁵³ *Id.*

⁵⁴ Law 20600, Creating Env'tl. Tribunals, *supra* note 31, at tit. II, art. XXVIII.

Chile, like the United States, has a hierarchy of laws. The supreme law in Chile comes from the Constitution and Constitutional Laws.⁵⁵ The second highest level of authority is found in “Ordinary Laws,” “Decree Law” (Decreto Ley), and “Delegated Laws” (Decreto con Fuerza de Ley).⁵⁶ Additionally, the executive branch of the Chilean government can issue decrees, which are a step down from Ordinary, Decree, and Delegated Laws.⁵⁷ These executive decrees are called Supreme Decrees when issued by the President of the Republic and simply Decrees or Resolutions when issued by any other executive authority.⁵⁸

The foundation of environmental law in Chile is the Environmental Framework Law (Ley Sobre Bases Generales del Medio Ambiente, Ley No. 19.300 del 19 de Marzo de 1994).⁵⁹ A summary of the most significant provisions in the Environmental Framework Law is available in Appendix C. Much of the rest of the country’s environmental laws are found in primary and secondary norms.⁶⁰ Primary norms are generally norms addressing classes of activities, such as mining or logging.⁶¹ Secondary norms generally address emissions or particular contaminants.⁶² Many of these norms are set at the regional and local level.⁶³ Ultimately, all environmental law in Chile flows from a Constitutional guarantee to the right to live in an environment free of pollution and an obligation for the state to protect and conserve the natural world.⁶⁴

The Environmental Framework Law provides the broad strokes of Chile’s environmental regime on which everything else is based. Generally, this law establishes a number of environmental institutions, programs, processes, and mechanisms for ensuring public participation. The most significant institution created in this law is the Ministry of the Environment, which is the equivalent of the U.S. EPA. The law establishes a number of sub-agencies, councils, and independent sub-agencies to carry out the obligations and programs established in the law.

The three most significant sub-entities are the Council of Ministers for Sustainability, the Consultative Councils, and the Environmental Assessment Service. The Council of Ministers for Sustainability is a council composed of the head minister for a number of other secretary level ministries (roughly equivalent to a cabinet level official in the U.S.) responsible for advising the President on issues of sustainability, including sustainable exploitation of resources and conservation issues. This Council can issue

⁵⁵ Comparative Environmental Law at 14-5.

⁵⁶ *Id.*

⁵⁷ *Id.*

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ *Id.* at 14-3.

⁶¹ *Id.*

⁶² *Id.*

⁶³ *Id.* at 14-4.

⁶⁴ *Id.* at 14-6.

resolutions that are binding on other state agencies. Any official violating one of these resolutions incurs “administrative liability.” The Consultative Councils are similar to E.P.A.’s Scientific Advisory Board and is composed of a mixture of scientists, laborers, industry representatives, and government officials. Each region has its own council in addition to the national council. Overall, these consultative councils are responsible for answering inquiries about environmental issues from government officials. Finally, the Environmental Assessment Service is an independent and decentralized agency within the Ministry of the Environment. This agency is charged with administering Chile’s environmental impact assessment system, which is a type of impact assessment required for many permits for activities dealing with construction, industry, agriculture, or chemical application activities.

Public participation in environmental policy-making, as well as public access to environmental information, is an important part of Chile’s environmental law regime. Many of the above described institutions have specific requirements to “promote and facilitate citizen participation” and to make all necessary environmental information available to the public.

Another notable area of Chilean environmental law is that the Minister of the Environment is responsible for setting emissions standards in cooperation with relevant sectoral ministers whose subject sector will be affected by the emissions standard. For example, if the Minister of the Environment is setting emissions standards for some process happening in mining operations, the Minister will need to work with the Minister of Mining to set the appropriate limit. Any standards that come out of this process are jointly issued between the two ministries.

V. Overview of Selected Environmental Issues in Chile.

Chile faces several well identified significant environmental issues, some of which are driven by economic factors and unique demographic characteristics. This section will briefly outline relevant economic and demographic factors as well as a few notable environmental issues.

a. General Considerations:

Economic Factors: Many of the environmental issues Chile currently faces are driven by economic activity.⁶⁵ Between 1990 and 2005, Chile experienced a 108% rise in GDP.⁶⁶ This has increased affluence and put significant pressure on natural resources used by the mining, forestry, and aquiculture industries.⁶⁷ Despite this increase in GDP, Chile has experienced a growing income inequality

⁶⁵ *Envtl. Performance Rev.*, *supra* note 20.

⁶⁶ *Id.*

⁶⁷ *Id.*

that has been ranked as the worst among Organization for Economic Co-Operation and Development (OECD) nations.⁶⁸ Chile drives most of its electricity from fossil fuels, roughly 64.4% as of 2009, and hydroelectric dams, which accounted for roughly 34.8% in 2009.⁶⁹ Activities in the mining, timber, and hydroelectric industries have created notable environmental justice situations among indigenous populations.⁷⁰ Additionally, the income inequality suggests there are likely other EJ communities. The research described in this memorandum suggests Chile has struggled to strike a balance between economic growth and environmental quality but is now making progress toward this goal through environmental reforms.

Demographic Factors: Chile's population is in a transitional period to an "aging society" due to the combination of a low mortality rate, a fertility rate below replacement levels, and a life expectancy on par with other developed nations.⁷¹ Roughly 40% of the population lived in the Santiago Metropolitan Area as of 2005.⁷² About 95.7% of the population is literate, which is defined here as being age 15 or older and possessing the capability to read and write.⁷³ Most Chileans, about 89%, live in urban areas.⁷⁴ Chileans overwhelmingly have access to improved drinking water sources and sanitation facilities. Only 4% of Chileans, primarily in rural areas, do not have access to improved sources of drinking water or sanitation facilities.⁷⁵ Indigenous peoples represent about 4.6% of the Chilean population as of the 2002 census⁷⁶ and they primarily reside in Regions⁷⁷ I (de Tarapacá), VIII (del Bío-Bío), IX (la Araucanía), X (de Lagos), and the Santiago Metropolitan Region. Indigenous peoples likely represent the single largest EJ community in Chile, though many of the same groups facing EJ issues in the United States are likely facing them in Chile, such as the poor, elderly, and less educated.

⁶⁸ *World Factbook: South America: Chile*, CENTRAL INTELLIGENCE AGENCY (2013), <https://www.cia.gov/library/publications/the-world-factbook/geos/ci.html> (last visited July 12, 2013) [hereinafter *CIA Factbook*].

⁶⁹ *Id.*

⁷⁰ David Schlosberg & David Carruthers, *Indigenous Struggles, Environmental Justice, and Community Capabilities*, *Global Environmental Politics* 10:4 (November 2010), available at http://www.mitpressjournals.org/doi/pdf/10.1162/GLEP_a_00029 (last visited July 12, 2013) [hereinafter *Indigenous Struggles*].

⁷¹ *CIA Factbook*, *supra* note 8.

⁷² *Envtl. Performance Rev.*, *supra* note 5, at 2.

⁷³ *CIA Factbook*, *supra* note 8.

⁷⁴ *Id.*

⁷⁵ *Id.*

⁷⁶ *Población y Sociedad: Aspectos Demográficos*, Chilean Government, at 40, available at http://www.ine.cl/canales/chile_estadistico/demografia_y_vitales/demografia/pdf/poblacion_sociedad_enero09.pdf (last visited July 12, 2013); see also *CIA Factbook*, *supra* note 8.

⁷⁷ Chile is administratively divided in descending order into 15 regions, 54 provinces, and 346 communes. (

b. Specific Issues

The main environmental issues Chile faces are widespread deforestation, the impact of mining operations, air pollution for industrial and vehicle emissions, and water pollution from raw sewage.⁷⁸

Deforestation: Second only to copper,⁷⁹ timber and wood products represent 34% of Chile's annual exports.⁸⁰ The United States is the largest importer of Chilean wood products.⁸¹ Chile's native forests comprise the second largest temperate rain forest in the world and 90% of the species found in these native forests are unique to Chile.⁸² Between 1985 and 1995, Chile lost nearly 2 million hectares of its native forests to wood product production and to make way for timber plantations.⁸³ This vast deforestation has significantly threatened biodiversity in Chile.⁸⁴ Roughly 1.76 million hectares of land has been reforested; however, about 84% of this land is planted with non-native timber plantations.⁸⁵ The timber plantation industry is concentrated in central and southern Chile.⁸⁶ Despite these figures, Chile has one of the highest percentages of protected forests in the world, with 19% of the country's land and 29% of its forests under protected status.⁸⁷ The timber industry has given rise to a number of environmental justice situations. Beginning during the Pinochet regime, Chilean economic policy has favored industrial forestry.⁸⁸ This has often occurred at the expense of indigenous peoples, particularly the Mapuche peoples.⁸⁹ These

⁷⁸ CIA Factbook; See also World Wildlife Fund, *Environmental Problems in Chile: Plantations Trampling Native Forests*, available at

http://www.panda.org/who_we_are/wwf_offices/chile/environmental_problems_chile/ (last visited July 12, 2013) [hereinafter *Environmental Problems*]; David Schlosberg & David Carruthers, *Indigenous Struggles, Environmental Justice, and Community Capabilities*, Global Environmental Politics 10:4 (November 2010), available at http://www.mitpressjournals.org/doi/pdf/10.1162/GLEP_a_00029 (last visited July 12, 2013). [hereinafter *Indigenous Struggles*].

⁷⁹ Copper alone provides 19% of the revenue received by the Chilean government. Fernando Raga, *The Chilean Forestry Sector and Associated Risks*, Trébol (Year XIV/2009) at 14, available at <http://www.mapfre.com/mapfre/docs/html/revistas/trebol/n51/docs/Articulo2en.pdf> (last visited July 12, 2013) [hereinafter *The Chilean Forestry Sector*].

⁸⁰ *Indigenous Struggles*, *supra* note 44, at 27. See also *The Chilean Forestry Sector*, *supra* note 45, at 14.

⁸¹ *The Chilean Forestry Sector*, *supra* note 45, at 15.

⁸² *Environmental Problems*, *supra* note 44.

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *The Chilean Forestry Sector*, *supra* note 45, at 12.

⁸⁶ Chile: Forest Resources Overview, *Forests and Forestry in the Americas: An Encyclopaedia*, available at http://www.encyclopediaofforestry.org/index.php/Chile:_Forest_Resources_Overview#Introduction (last visited July 13, 2013) [hereinafter *Forests and Forestry*].

⁸⁷ *The Chilean Forestry Sector*, *supra* note 45, at 13.

⁸⁸ *Indigenous Struggles*, *supra* note 44, at 27.

⁸⁹ *Id.*

policies have continued to a certain extent as Chile has democratized.⁹⁰ The indigenous population has become more active in pushing for land rights and autonomy.⁹¹

Impact of Large-Scale Mining: The mining industry in Chile is among the most significant in the world and is among the nation's most important industries.⁹² Chile's leading export is copper.⁹³ Some of the more notable environmental issues arising out of Chile's large scale mining industry are conflicts over the availability of water, availability of energy, and the impact of smelter emissions on air quality.⁹⁴ The Atacama Desert in northern Chile is one of the world's most important mining regions.⁹⁵ Water is scarce in this area and mining has further decreased its availability, threatening the area's wetlands, biodiversity, and remaining indigenous communities.⁹⁶ As an issue of environmental justice, the pressures of the mining industry have also caused a transfer of water rights away from ancient indigenous villages traditionally practicing sustainable irrigation.⁹⁷ Because water is treated as a privately traded commodity in Chile, water rights have become concentrated with a few individuals, a phenomenon that has been credited with promoting unsustainable water usages in arid regions.⁹⁸ Additionally, the intense energy needs of the mining industry have spurred the growth of hydroelectric projects in Chile.⁹⁹ In southern regions, this has resulted in the displacement of indigenous peoples and the inundation and distraction of sites of spiritual and cultural significance to indigenous peoples.¹⁰⁰

Air Pollution: Chile suffers significant air quality problems.¹⁰¹ In the first third of 2013, seven major Chilean cities have logged at least 37 days of dangerous levels of fine particulate matter.¹⁰² These cities are home to nearly seven million

⁹⁰ *Id.* at 27-29.

⁹¹ *Id.* at 30

⁹² Sustainable Development Strategies Group, *Report: Current Issues in the Chilean Mining Sector* (2010), at 4, available at <http://www.sds.org/wp-content/uploads/2010/02/10-10-08-CHILE-REPORT.pdf> (last visited July 16, 2013) [hereinafter *Report: Current Issues in the Chilean Mining Sector*]; *The Chilean Forestry Sector*, *supra* note 45, at 14.

⁹³ *The Chilean Forestry Sector*, *supra* note 45, at 14.

⁹⁴ *Report: Current Issues in the Chilean Mining Sector*, *supra* note 58, at 7.

⁹⁵ *Id.* at 8.

⁹⁶ *Id.* at 9.

⁹⁷ *Id.*

⁹⁸ *Id.* at 11.

⁹⁹ *Id.* at 15.

¹⁰⁰ *Indigenous Struggles*, *supra* note 44, at 26.

¹⁰¹ Marcelo Arenas et al., *Environmental Information System For Analysis and Forecast of Air Pollution (Application to Santiago de Chile)*, at 1, available at <http://web.ing.puc.cl/~marenas/publications/icems00.pdf> [hereinafter *Environmental Information System*].

¹⁰² Igor I. Solar, *Chile: Severe Air Pollution Affecting Seven Major Cities*, DIGITAL JOURNAL (July 5, 2013), available at <http://digitaljournal.com/article/353756> [hereinafter *Chile: Severe Air Pollution*].

people.¹⁰³ The air quality problems are caused by a number of factors, including geography, concentrated populations, and industrial activity.¹⁰⁴



Figure 1: A Thick smog blankets Temuco, the capital of Chile's southern Araucanía Region, for a sixth day in a row on June 12, 2013.

For example, Santiago, which is home to about one third of Chile's population, is situated in a basin completely surrounded by mountain ranges.¹⁰⁵ The dense population creates a situation where emissions from transportation, domestic, and industrial activities accumulates in a concentrated area and is unable to dissipate due to the mountain barriers surrounding the city.¹⁰⁶ As of June 30, 2013, Santiago had exceeded the daily maximum standard of 50 $\mu\text{g}/\text{m}^3$ [micrograms per cubic meter] of fine particulate matter (PM2.5) on 45 days.¹⁰⁷ As can be seen from the fact that these air problems are occurring in so many different places, air pollution of this type is a serious challenge in Chile because of the unique combination of geography, concentrated populations, and concentrated industrial activity.

¹⁰³ *Id.*

¹⁰⁴ *Environmental Information System, supra* note 67.

¹⁰⁵ *Id.*

¹⁰⁶ *Id.*

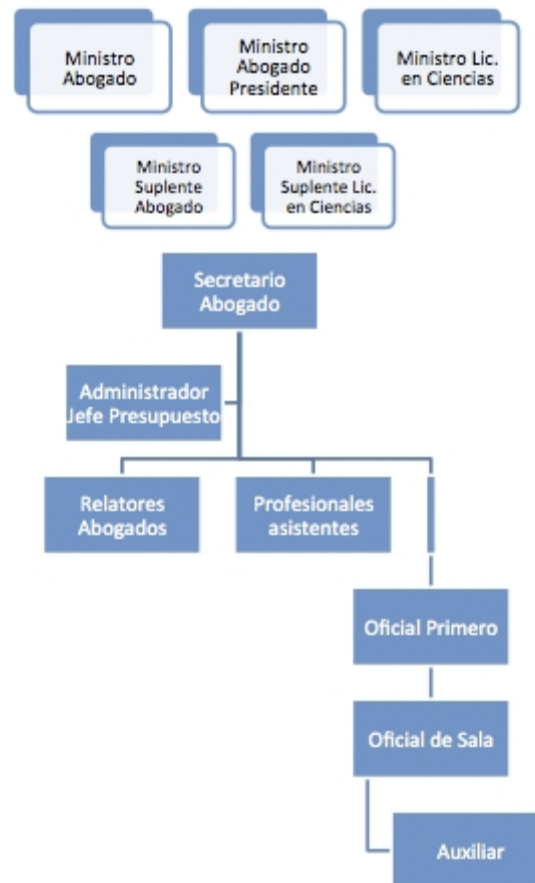
¹⁰⁷ *Chile: Severe Air Pollution, supra* note 68.

APPENDIX A

Environmental Tribunal Organizational Chart

Translations

- **Ministro Abogado**
Judge with legal education
- **Ministro Abogado Presidente**
Chief Judge, with legal education
- **Ministro Lic. En Ciencias**
Judge, with scientific education
- **Ministro Suplente Abogado**
Alternate Judge, with legal education
- **Ministro Suplente Lic. En Ciencias**
Alternate Judge, with scientific background
- **Secretario Abogado**
Attorney/Law Secretary
(possibly like a law clerk)
- **Administrador Jefe Presupuesto**
Chief Budget Administrator
- **Relatores Abogados**
Attorney Reporter
- **Profesionales Asistentes**
Professional Assistants
- **Oficial Primero**
First Official
- **Oficial de Sala**
Courtroom Official
- **Auxiliar**
Auxiliary Personnel



APPENDIX B

Map of Chile showing Regional subdivisions. In addition to the region names shown below, each region is also assigned a roman numeral, by which it is sometimes referred.



APPENDIX C

Summary of major provisions in the Environmental Framework Law of Chile, Law 19,300.

1. Environmental Impact Assessment System (Article 2)

Title II, Article 2 of Law 19300 (Environmental Law of Chile), provides that certain construction, industrial, agricultural, or chemical application activities may not be authorized by permit or other administrative processes before the completion and submission of an environmental impact assessment or study as the case may be.¹⁰⁸

2. Community Participation in the Environmental Impact Assessment Process (Article 3)

Title II, Article 3 of Law 19300 (Environmental Law of Chile) requires the governmental committee receiving an environmental impact assessment under Title II, Article 2, to foster public participation through a public notice and comment period of 60 days.¹⁰⁹ The public participation process as well as public access to information is subject to certain trade secrets exemptions.¹¹⁰

3. Access to Environmental Information (Article 3 *bis*)

Title II, Article 3 *bis* of Law 19300 (Environmental Law of Chile) provides the public with the right to access any environmental information in the possession of state agencies so far as constitutional and Chilean freedom of information laws permit.¹¹¹ The term “information” is defined as any written, visual, auditory, electronic, or recorded information on a diverse array of environmental topics, including compliance reports, economic and social analyses, and “any other information on the environment.”¹¹²

4. Environmental Quality and Nature Preservation and Environmental Heritage Conservation Standards (Article 4)

Under Title II, Article 4 of Law 19300 (Environmental Law of Chile), primary environmental quality standards may only be issued with the joint approval of the Minister of the Environment and the Minister of Health.¹¹³ Secondary environmental quality standards may be issued by the joint approval of the Minister of the Environment and an appropriate sectoral minister whose ministry is competent in the issue or

¹⁰⁸ See generally Ley No. 19300, 1 March 1994 [Aprueba Ley Sobre Bases Generales del Medio Ambiente] [Bases Generales del Medio Ambiente] [General Bases of the Environment] tit. II, art. 1, DIARIO OFICIAL, Biblioteca del Congreso Nacional de Chile [BCNC], 13 November 2010 (Chile), available at <http://www.leychile.cl/Navegar?idNorma=30667&buscar=Ley+19300> [hereinafter *Environmental Law of Chile*].

¹⁰⁹ *Id.* at tit. II, art. 3.

¹¹⁰ *Id.*

¹¹¹ *Id.* at tit. II, art. 3 *bis*.

¹¹² *Id.*

¹¹³ *Id.* at tit. II, art. 4.

subject.¹¹⁴ Standards must be reviewed by the Ministry of the Environment every five years.¹¹⁵ Standards must be promulgated through a process involving “technical and economic analysis, scientific studies development, consultations to competent public and private agencies, analysis of the observations [public comments] made and adequate advertising [public notice].”¹¹⁶ The Ministry of the Environment is obligated to use the programs established in the standards and the information gathered through these programs to protect “the right to live in a pollution-free environment.”¹¹⁷ This Article also provides for the management of wildlife and protected lands under the authority of a Biodiversity and Protected Areas Service, which appears to be similar to the U.S. National Park Service or the U.S. Fish and Wildlife Service.¹¹⁸ Some of these management responsibilities fall to local or regional authorities; however, in all cases, the managing authority is supervised by the Ministry of the Environment.¹¹⁹

5. Emission Standards (Article 5)

Title II, Article 5 of Law 19300 (Environmental Law of Chile) requires the Minister of the Environment to jointly promulgate emissions standards with the Minister of the appropriate sectoral ministry.¹²⁰ The law anticipates that emissions standards will be region specific and requires a specific statement of the territorial scope of the standard.¹²¹

6. Management, Prevention or Decontamination Plans (Article 6)

Title II, Article 6 of Law 19300 (Environmental Law of Chile) charges the Ministry of the Environment with ensuring the sustainable use and exploitation of renewable natural resources to ensure regeneration capacity and biological diversity.¹²² Specifically, the Ministry is charged with (a) maintenance of water flows and soil conservation, (b) maintenance of scenic value, and (c) protecting certain statutorily classified species.¹²³

Article 6 also provides for the designation of “saturated or latent areas,” which appear to be a kind of pollution or environmental quality non-attainment zones.¹²⁴ The Ministry of the Environment is responsible for creating standards and programs to address these zones jointly with the Minister of Health, where such action requires primary environmental quality standards, or with the relevant sectoral minister, where

¹¹⁴ *Id.*

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ *Id.*

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ *Id.* at tit. II, art. 5.

¹²¹ *Id.*

¹²² *Id.* at tit. II, art. 6.

¹²³ *Id.*

¹²⁴ *Id.*

such action implicates secondary environmental quality standards.¹²⁵

7. The complaint procedure (Article 7)

Title II, Article 7 of Law 19300 (Environmental Law of Chile) provides for any person to file an objection to a regulation (primary or secondary environmental quality standard, emissions standard, declaration of latent and saturated area, or a prevention or decontamination plan) with the environmental court within 30 days of the regulation being published in the Official Gazette, which is roughly equivalent to the U.S. Federal Register.¹²⁶ In order to file such a complaint, the person must allege the regulation is not consistent with Law 19300 (Environmental Law of Chile) and that he/she has been adversely affected.

8. Environmental Damage (title III, Article 1)

Title III, Article 1 of Law 19300 (Environmental Law of Chile), provides that “any person that willfully or negligently causes an environmental damage shall be liable therefore in accordance with this law.” Generally, any violation of an environmental statute or provision is per se evidence of liability.¹²⁷ However, compensation for environmental damage is only payable if causation is evident.¹²⁸ Damage liability, however can be averted if the perpetrator satisfactorily implements a rehabilitation plan approved by the Environmental Commission.¹²⁹

9. Environmental Protection Fund (Title V)

Title V of Law 19300 (Environmental Law of Chile), creates the Environmental Protection Fund, which has the objective of financing, in whole or in part, projects or activities to protect or rehabilitate the environment or programs and activities that promote sustainable development and the preservation and conservation of nature and environmental heritage.¹³⁰ The fund is administered by the Ministry of the Environment.¹³¹ Funding decisions below a certain dollar value¹³² are made by the

¹²⁵ *Id.*

¹²⁶ *Id.* at tit. II, art. 7.

¹²⁷ This includes infringement of environmental quality, emission standards, the prevention or decontamination plans, special regulations for environmental emergency plans, the regulations on environmental protection, preservation or conservation constitutes per se liability. *See generally Environmental Law of Chil*, *supra* note 2.

Chile [BCNC], 28 June 2012 (Chile), *available at* <http://www.leychile.cl/N?i=1041361&f=2012-06-28&p=>.

¹²⁸ General Bases of the Environment, *supra* note 2, at sec. V.

¹²⁹ *Id.* at sec. VI.

¹³⁰ *Id.* at Title V.

¹³¹ *Id.* at Title V.

¹³² The dollar value is “five hundred Unidades de Fomento.” *Id.* Although I have not been able to find an official English language explanation of what is a Unidades de Fomento, Wikipedia states that it is a unit of measure used in banking transactions in Chile and that it has an exchange rate with the Chilean Peso that is constantly in flux as a result of inflation. *See* Wikipedia, *Unidad de Fomento*, http://en.wikipedia.org/wiki/Unidad_de_Fomento (last visited Aug. 2, 2013).

undersecretary of the environment while decisions above that dollar value are made through a “public contest.”¹³³ The law provides that the fund should be composed of money donated and bequeathed to the fund as well as through national budget authorization appropriations and any other donations from public or private entities, whether domestic or foreign.¹³⁴

10. Ministry of the Environment

Final Title Article 1 of Law 19300 (Environmental Law of Chile) creates the Ministry of the Environment as a State Secretariate charged with “assisting the Chilean President in the design and implementation of environmental policies, plans and programs, as well as the protection and conservation of biological diversity and of renewable natural and water resources, to promote sustainable development and the integrity of the environmental policy and statutory regulations.”¹³⁵ It appears this is the equivalent of a cabinet level agency. The Ministry of the Environment is responsible for setting environmental policy in Chile, ensuring Chile complies with its obligations under international environmental agreements, and working with the other sectoral ministries to address environmental issues involving the subject industries or sectors under the sectoral ministry’s purview.¹³⁶ The Ministry also conducts research on environmental issues and supports such research at other ministries.¹³⁷ The Ministry is also specifically charged with promoting and facilitating citizen participation in the formulation of environmental policies and plans, quality and emissions standards, and in the strategic environmental assessment process.¹³⁸

11. The Council of Ministers for Sustainability Nature and Duties

Final Title Article 1 of Law 19300 (Environmental Law of Chile) establishes the Council of Ministers for Sustainability and designates the Minister of the Environment as the chairman of the council.¹³⁹ The other members of the Council are the ministers of Agriculture, Finance, Health, Economics, Promotion and Reconstruction, Energy, Public Works, Housing and City Planning, Transportation and Telecommunications, Mining, and Planning.¹⁴⁰ The Council serves in an advisory capacity to the President on issues of sustainability, including sustainable exploitation of natural resources policies, and other conservations issues such as the creation of state protected areas, including parks, reserves, and sanctuaries.¹⁴¹ Meetings of the Council are on an ad hoc basis as designated

¹³³ General Bases of the Environment, *supra* note 2, at Title V.

¹³⁴ *Id.* at Title V.

¹³⁵ *Id.* at Final Title, Article 1.

¹³⁶ *Id.* at Final Title, Article 1.

¹³⁷ *Id.* at Final Title, Article 1.

¹³⁸ *Id.* at Final Title, Article 1.

¹³⁹ *Id.* at Final Title, Article 2.

¹⁴⁰ *Id.* at Final Title, Article 2.

¹⁴¹ *Id.* at Final Title, Article 2.

by the Chairman.¹⁴² Most importantly, the Council has the power to issue resolutions that are binding on State Agencies.¹⁴³ Any official that fails to comply with such a council resolution incurs “administrative liability.”¹⁴⁴ The Council is administratively housed in the Ministry of the Environment, which must provide all resources and support for its operation.

12. Consultative Councils

Final Title Article 4 of Law 19300 (Environmental Law of Chile) provides for the creation of a national Consultative Council and Regional Consultative Councils, which appears to be a rough equivalent of EPA’s Scientific Advisory Board.¹⁴⁵ The Council is charged with answering inquiries made by the Ministry of the Environment and the Council of Ministers for Sustainability as well as issuing opinions on bills and executive decrees regarding the environment.¹⁴⁶ Each region has its own Consultative Council.¹⁴⁷ The Councils are composed of two scientists, two representatives from non-profit non-governmental organizations with the mission of protecting the environment, two representatives from the corporate world, two representatives from the labor force, and one representative from the Minister of the Environment.¹⁴⁸ The regional councils are charged with answering inquiries from the Regional Governor, the Regional Government, and the Regional Secretary of the Ministry of the Environment.¹⁴⁹ The councils are all administratively housed in the Ministry of the Environment.

13. Environmental Assessment Service

Final Title Article 6 of Law 19300 (Environmental Law of Chile) establishes the Environmental Assessment Service to function as an independent and decentralized public agency under the supervision of the Chilean President through the Ministry of the Environment.¹⁵⁰ The Service is responsible for managing the Environmental Impact Assessment System,¹⁵¹ which is a cornerstone of Chilean environmental law. In managing this system, the Service must keep publicly available records of permits issued and data collected as well as promote and facilitate citizen participation in the assessment process.¹⁵² The decentralization of the Service is achieved by establishing “Regional Environmental Assessment Directorates,” which are responsible for the system in their region.¹⁵³

¹⁴² *Id.* at Final Title, Article 2.

¹⁴³ *Id.* at Final Title, Article 2.

¹⁴⁴ *Id.* at Final Title, Article 2.

¹⁴⁵ *Id.* at Final Title, Article 4.

¹⁴⁶ *Id.* at Final Title, Article 4.

¹⁴⁷ *Id.* at Final Title, Article 4.

¹⁴⁸ *Id.* at Final Title, Article 4.

¹⁴⁹ *Id.* at Final Title, Article 4.

¹⁵⁰ *Id.* at Final Title, Article 6.

¹⁵¹ *Id.* at Final Title, Article 6.

¹⁵² *Id.* at Final Title, Article 6.

¹⁵³ *Id.* at Final Title, Article 6.

APPENDIX D

Minister Biographies

José Ignacio Vásquez Márquez (Minister, Lawyer, President of the Tribunal)

Jose Ignacio Vasquez Marquez received the equivalent of a J.D. from the University of Chile and a Masters in Political Science from the Institute of Political Science, University of Chile. (1990-1991). He was a Foundation Hanns Seidel fellow where he did research in München, Germany, (January to October of 1992) and received a P.h.D. from the University of the Andes.

President Vasquez Marquez has an extensive trajectory as an academic of public rights in areas such as: municipalities, urban development, administrative practice, constitutional rights and political science from diverse private and public universities on a national level.

He has been an Associate Director of the “Consultora Constitucional Económica” and of a Study known as the “Study Contreras, Sagredo, Navarre y Vásquez.” He also served as Associate Lawyer and Consultant on matters related to urban development, administrative law, and constitutional rights at *Poch Engineers Consultants* (2004 – 2006).

President Vasquez served as Arbitrator for the Center of Arbitration and Mediation of the Chamber of Commerce of Santiago (2009 – 2012). He also served as Director of Studies, Analysis, and Evaluation at the Supreme Court of Justice (2006 – 2012). He has written diverse articles in publications concerning public rights and foreign, national, and political science.

Rafael Asenjo Zegers (Minister, Lawyer)

Rafael Asenjo Zejers received the equivalent of a J.D. from the University of Chile. He was awarded a Fulbright Fellowship for professional improvement ("at mid-career level") to study Politics and Environmental Law at American University and Georgetown University, Washington D.C., United States (1988 – 1989).

As part of his long professional trajectory, he has served as the first Executive Director of the National Commission of the Environment, CONAMA (1990 to 1994), prompting the preparation of the first instruments of environmental management in Chile, among them, the Law 19.300, which outlined the first environmental laws and the Environmental Impact Evaluation System (SEIA). He also served as Executive Director of the World Environment Fund, part of the United Nations program in New York (1995 to 2001); and as a National Coordinator of the GEF-PNUD-MMA program, also known as the "Creation of an Integral National System of Areas Protected for Chile" (2009 – 2012).

As the Principal Investigator and President of the Center of Studies for the Development (CED), he helped implement activities and environmental projects throughout the majority of Latin America and the Caribbean; and as a political, legislative, and environmental management consultant, he aided both private and public institutions on a national and international level (UNCCC- BID – PNUD).

In 2007 he received the "Premio Oxígeno," and accolade, offered yearly by the Program in Management and Environmental Code (PROGOA) of the Faculty of Engineering of the University of Santiago in Chile in recognition of his contribution to the development of the Environmental Management in Chile.

He also made significant contributions as a professor of environmental law in different graduate-level university programs in Chile. He has written more than 20 publications on public institutionalism, pieces on environmental management, and pieces on sustainable development.

Sebastián Valdés de Ferari (Minister, Scientific Expert)

Minister Valdes de Ferari is a commercial engineer and received his Bachelor of Science in Economics and Administrative Science at the University of Chile (1988). He obtained a Ph.D. in Environmental and Resource Economics from the Department of Agrarian Economy and Natural Resources, University of Maryland, College Park, U.S. (1995).

For more than 10 years he served as an instructor and professor of the Department of Economy, the School of Public Administration and the graduate School, in the Economics Department at the University of Chile (1988 – 1998).

He also served as the Manager of the Division of Mutual International Environment, a subsidiary of Security Mutual, advising on matters of environmental management and social responsibility to Security Mutual (1998-2001) and Director of the Environmental Risks Prevention Program at Security Mutual (2001-2005).

He served as the consultant on environmental economy at Optima Technical Services and for the Office of the Chief Economist of the World Bank for Latin America and the Caribbean. He also served as a consultant of the GEF, PNUD, BID, CEPAL and World Bank.

He was a Professor at the post-graduate school of the University of Chile and the University of the Development and an adjunct professor at the universities of Argentina, Colombia and Bolivia.

He also served as Senior Economist at the Division of Socioeconomic Evaluation of Environmental Impacts of the CENMA (2004); as Manager of Corporate Responsibility

in Cellulose Arauco and Constitution S.A. (2005 – 2009); Manager of Sustainability at the National Business of Mining Industry (ENAMI) (2010-2012). He also has been serving as an Associate Investigator at the Center of Economy for Natural Resources and the Environment at the University of Chile since 1995.